

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61L9/12 F24F3/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61L F24F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|---|-----------------------|
| A | US 2001/023593 A1 (IMASAKA TOSHIYUKI ET AL) 27 September 2001 (2001-09-27) paragraphs '0005! - '0018!; figure 1 | 1-11 |
| A | WO 99/59832 A (HARA SHINICHI ; HAYASHI NAOTO (JP); ZEXEL CORP (JP)) 25 November 1999 (1999-11-25) abstract; figures 5,6 | 1-11 |
| A | US 2002/197186 A1 (MURRAY JOSEPH C) 26 December 2002 (2002-12-26) abstract; figures 1,12 | 1-11 |
| A | US 2001/035095 A1 (CANFIELD DAVID) 1 November 2001 (2001-11-01) abstract; figure 1 | 1-11 |
| | ----- -/-- | |

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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T later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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Date of the actual completion of the International search

9 November 2004

Date of mailing of the International search report

17/11/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Valenza, D

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|------------|--|-----------------------|
| A | PATENT ABSTRACTS OF JAPAN vol. 0186, no. 69 (M-1725), 16 December 1994 (1994-12-16) & JP 6 262937 A (ZEXEL CORP), 20 September 1994 (1994-09-20) abstract | 1-11 |
| A | PATENT ABSTRACTS OF JAPAN vol. 1999, no. 13, 30 November 1999 (1999-11-30) & JP 11 211126 A (SHARP CORP), 6 August 1999 (1999-08-06) abstract | 1-11 |

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB2004/002655

| Patent document cited in search report | | Publication date | Patent family member(s) | | Publication date |
|---|----|---------------------|----------------------------|---------------|---------------------|
| US 2001023593 | A1 | 27-09-2001 | JP | 2001248852 A | 14-09-2001 |
| WO 9959832 | A | 25-11-1999 | JP | 11321297 A | 24-11-1999 |
| | | | JP | 11325652 A | 26-11-1999 |
| | | | JP | 11342729 A | 14-12-1999 |
| | | | WO | 9959832 A1 | 25-11-1999 |
| US 2002197186 | A1 | 26-12-2002 | US | 2002197187 A1 | 26-12-2002 |
| US 2001035095 | A1 | 01-11-2001 | AU | 5317801 A | 23-10-2001 |
| | | | WO | 0176648 A1 | 18-10-2001 |
| JP 6262937 | A | 20-09-1994 | NONE | | |
| JP 11211126 | A | 06-08-1999 | JP | 3254416 B2 | 04-02-2002 |